

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
29 December 2004 (29.12.2004)

PCT

(10) International Publication Number
WO 2004/114717 A2

(51) International Patent Classification⁷: **H04R 1/00**

(21) International Application Number: **PCT/GB2004/002588**

(22) International Filing Date: 17 June 2004 (17.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0314007.6 17 June 2003 (17.06.2003) GB

(71) Applicant (*for all designated States except US*): **SFX TECHNOLOGIES LIMITED [GB/GB]**; SFX House, 6 Pitreavie Court, Pitreavie Business Park, Dunfermline KY11 8UU (GB).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **HYND, Ian [GB/GB]**; SFX Technologies Limited, SFX House, 6 Pitreavie Court, Pitreavie Business Park, Dunfermline KY11 8UU (GB). **MUNOZ FRIGOLA, Jordi [ES/GB]**;

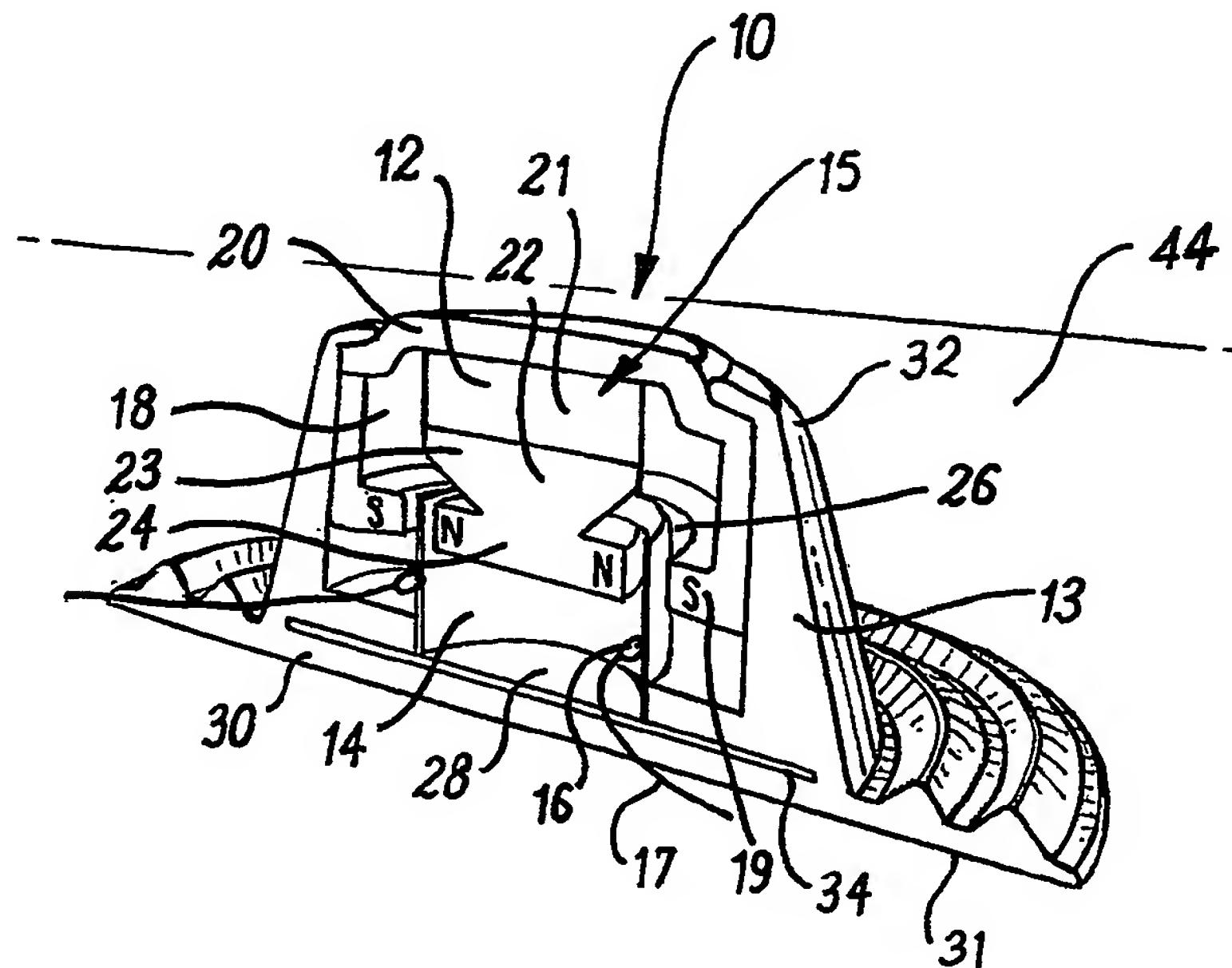
(74) Agent: **KENNEDYS PATENT AGENCY LIMITED**; Queens House, Floor 5, 29 St. Vincent Place, Glasgow G1 2DT (GB).

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: IMPROVEMENTS TO LOUDSPEAKER DRIVER ASSEMBLIES



(57) Abstract: An improved driver assembly for a panel loudspeaker includes a retaining element for locating the voice coil with respect to the magnet assembly and forming a surface for removable attachment of the driving assembly to a radiating member. In a preferred embodiment, the retaining element is injection moulded from a hydrogel material with Shore A hardness in the range 0 to 20.

WO 2004/114717 A2



European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- *without international search report and to be republished upon receipt of that report*

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
29 December 2004 (29.12.2004)

PCT

(10) International Publication Number
WO 2004/114717 A3

(51) International Patent Classification⁷: H04R 1/02, 7/04, 31/00

(21) International Application Number:

PCT/GB2004/002588

(22) International Filing Date: 17 June 2004 (17.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0314007.6 17 June 2003 (17.06.2003) GB

(71) Applicant (for all designated States except US): SFX TECHNOLOGIES LIMITED [GB/GB]; SFX House, 6 Pitreavie Court, Pitreavie Business Park, Dunfermline KY11 8UU (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): HYND, Ian [GB/GB]; SFX Technologies Limited, SFX House, 6 Pitreavie Court, Pitreavie Business Park, Dunfermline KY11 8UU (GB). MUNOZ FRIGOLA, Jordi [ES/GB]; SFX Technologies Limited, SFX House, 6 Pitreavie Court, Pitreavie Business Park, Dunfermline KY11 8UU (GB).

(74) Agent: KENNEDYS PATENT AGENCY LIMITED; Queens House, Floor 5, 29 St. Vincent Place, Glasgow G1 2DT (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

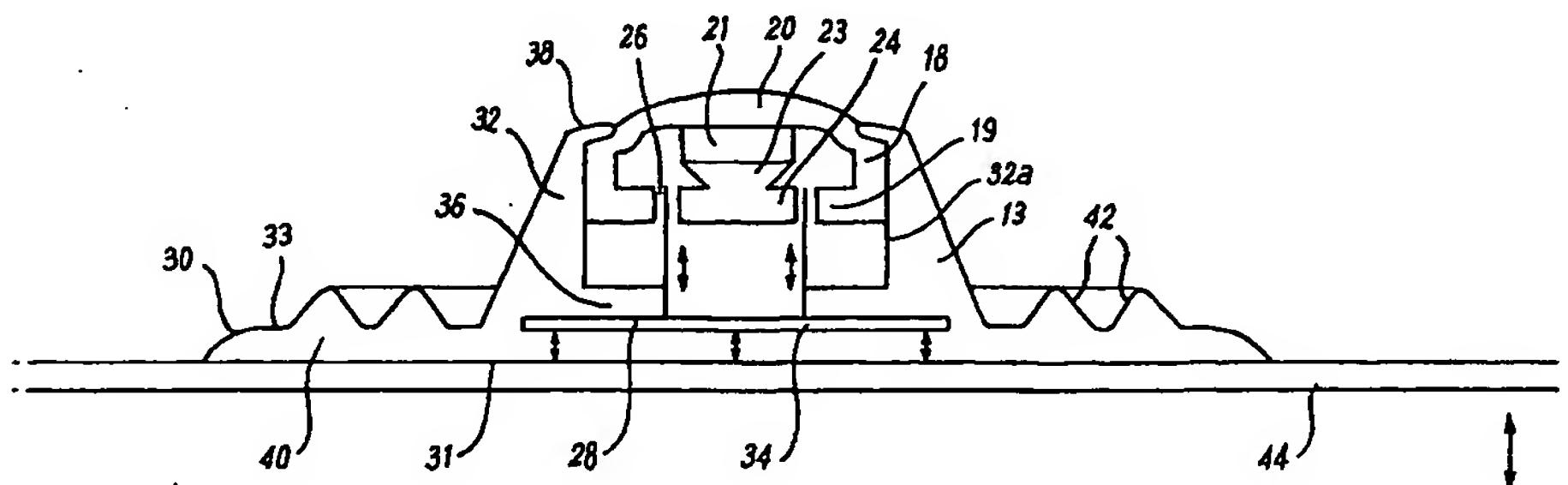
Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report: 24 February 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: IMPROVEMENTS TO LOUDSPEAKER DRIVER ASSEMBLIES



(57) Abstract: An improved driver assembly for a panel loudspeaker includes a retaining element for locating the voice coil with respect to the magnet assembly and forming a surface for removable attachment of the driving assembly to a radiating member. In a preferred embodiment, the retaining element is injection moulded from a hydrogel material with Shore A hardness in the range 0 to 20.

WO 2004/114717 A3